

SLIDER WITH PRESSURE RELIEF TRENCHES

ABSTRACT OF THE DISCLOSURE

A slider for supporting transducer elements for a data storage system including at least one pressure relief trench formed in the raised bearing proximate to a contact interface position of the slider and disc surface. The trench is sized to reduce capillary pressure of the meniscus relative to disjoining pressure of a lubricant film layer on the disc surface to limit the area or expansion of a film bridge or meniscus between the bearing surface of the slider and disc surface.